

# Tyler McCarthy

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Github.com/point01  
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## Objectives

Seeking full time software development positions in San Francisco, especially those focusing on Android & iOS development, web development, security engineering, and virtual reality applications in Unity and Unreal engine

## Employment

Edmodo - Security Engineering Intern      San Mateo, CA      May - Aug 2015

- Designed, built, tested and deployed to AWS - service that detects malware and analyzes text in hundreds of user-generated content submissions per minute in arbitrary file format using Python, Flask, Apache Tika, Docker
- Designed, built, tested and maintained a moving-window rate limiting service covering entire platform, improving considerably over previous PHP implementation using Python, Apache Thrift, Docker, Redis
- Tested, confirmed, corrected, and documented security holes in PHP backend code
- Built a tool to automatically detect & fix mixed content on Wordpress blog pages
- Light dev/ops work in Amazon Web Services

Grand Valley Surplus Store - Student IT Tech      Grand Rapids, MI      Jun - Sep 2014

- Managed FOG disk imaging server, ensured total data wipe and reimaging of hundreds of computers with Linux; directly aided customers at checkout and during sales

## Skills & Experience

### Programming Languages:

Strong: Python, Java, C, C#, BASH scripting

Some exposure: PHP, Ruby, Haskell, Lisp

Learning: C++, OpenGL & GLSL

### Operating systems:

- Extensive Linux (Arch Linux, CentOS, Ubuntu)
- Windows 7, 8.1 & 10

### Programs & Environments:

- Android Studio, Eclipse, Visual Studio
- Unity 5, Unreal Engine 4.5

### B.S., Computer Science

Grand Valley State University      Dec. 2015

### Technologies :

- Apache Thrift, Apache Tika
- Docker, Amazon Web Services mgmt.
- Redis, SQLite, General SQL/DB concepts

### System security :

- Secure network architecture, firewall
- Practical crypto, IDS, honeypots, pentesting
- Linux server hardening experience

## Recent Projects

- Several Android demo projects available here
- Square Wars - GVSU capstone project in Unity
- Atomic Games 9 hr. Hackathon - Othello AI

Github.com/point01/android-apps

Github.com/point01/square-wars

Github.com/point01/atomic-othello

## Voluntarism & Student Organizations

Computer Security Team - Grand Valley - Team Coordinator

2013 - 2014

- Organized meetings & team practice, researched and taught skills, set up practice network
- Team competed in 2014 Michigan Collegiate Cyber Defense Competition

Student Environmental Coalition - Grand Valley - Treasurer

Sep - Dec 2013

- Balanced budget; wrote and presented funding requests, helped organize service events
- Secured 100% funding for 20 student attendees to Powershift environmental conference

Center For Inquiry - Grand Valley - Vice President, Treasurer, Service Coordinator

2011 - 2013

- Helped coordinate and execute speech by Neil deGrasse Tyson at GVSU (4,000 attendees)